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EXAMINER
DISTEFANO, GREGORY A

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2176	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>23 December 2008</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-6 and 8-20</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-6 and 8-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>7/7/2008</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☒ All   b) ☐ Some * c) ☐ None of:

         1. ☒ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____.

         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the amendment filed on 12/23/2008.

2.   Claims 1-6 and 8-20 have been submitted for examination.

Specification

3.   The disclosure is objected to because of the following informalities: On page 3,

lines 3-4, there are several blank spaces that should be correctly filled.

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for

the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

of the following is required: all of the recited components (i.e., "*playlist generator*," both

"*user interfaces*," "*artist similarity module*," "*artist selector*" and "*item selector*") of the

"*system*" of Claim 1.   The Specification does not mention the details of exactly what

comprises each of these recited components. Because the components make up the

recited "*system*," the Specification also fails to mention the details of exactly what

comprises the "*system*." For example, the Specification fails to disclose whether each

recited component comprises computer software or computer hardware.

Accordingly, there is no support or antecedent basis for each of the recited

components of the "*system*" or the "*system*" itself that allows the meanings of the terms

to be ascertained, as required in 37 CFR 1.75(d)(1).

For purposes of examination, the examiner interprets each of the components as computer software.

Claim Objections

Claim 13 is objected to because of the following informalities:

- The recited element "*the system*" in Lines 5-6 has no antecedent basis.

- The phrase "*select item*" in Line 15 should be amended to — select<u>ed</u> item — so that it is more clearly worded.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

6.   Claims 1-12 are specifically directed to a system. This "system," and each of its components, may be interpreted to be simply computer software per se which is nonstatutory subject matter.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 1-7, 12-15, and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Dunning et al. (US 2003/0229537), hereinafter Dunning, in view of

Porteus et al. (US 6,933,433), hereinafter Porteus.

9.   As per claim 1, Dunning teaches the following:

a playlist generator that is configured to create a playlist, and includes:

a user interface that facilitates identification of an identified artist (see Fig. 11,

#1101);

an artist similarity module that is configured to identify one or more similar artists

to an identified artist to create an artist list, (pg. 15, paragraph [0252]), i.e. referring now

to Fig. 11, there is shown an example of a screen shot 1100 depicting sample <u>artist-</u>

<u>level relationships</u>. Query term 1101 is shown, along with the list 1102 of recommended

artists, generated by engine 107,

a user interface that presents the artist list to the user (see Fig. 11, #1102);

However, Dunning does not explicitly teach a method where the interface allows the user to approve or modify the artist and artists are selected iteratively. Porteus teaches the following:

a user interface that presents the artist list to the user and facilitates the approval or modification of the artist by a user, (column 3, lines 19-29), i.e. the user is presented with a plurality of artist blocks for each supergenre, along with the names of selected artists that have been categorized in each block when appropriate. The user is then asked for his or her preferences relating to the desirability of including such blocks into his/her station's rotation, as shown in block 12. In the preferred embodiment of the invention, the user is given four choices for the user's interest in hearing songs from each artist block, ranging from "Never" to "a Lot", with two levels of "Sometimes" in between. The user's expression of interest is used to adjust the preliminary ratings for all of the artists in that block;

an artist selector, operably coupled to the artist similarity module, that is configured to iteratively select a selected artist from the artist list upon initiation by the user of the generation of the playlist, (column 3, lines 56-57), i.e. to produce the master playlist, artists are chosen according to the rating assigned to them; and

an item selector, operably coupled to the artist selector, that is configured to:

select a selected item associated with the selected artist from a source of items, (column 3, lines 56-58), i.e. to produce the master playlist, artists are

chosen according to the rating assigned to them, <u>and individual songs by those artists</u> <u>are selected</u>, *and*

include an identifier of the selected item in the playlist, (column 3, lines 56-58), i.e. to produce the master playlist, artists are chosen according to the rating assigned to them, and individual songs by those artists are selected <u>for inclusion in the master</u> <u>playlist</u>.

It would have been obvious to one of ordinary skill in the art to have modified the artist similarity discovery method of Dunning with the rating and playlist creation method of Porteus. One of ordinary skill in the art would have been motivated to have made such modifications because both Dunning and Porteus are analogous art in the field of aiding users in creating playlists of songs. Upon the modification of Dunning in view of Porteus a user would first input and discover similar artists of an identified artist. The user would than be provided with the block interface of Porteus to modify the artist list and create the playlist.

10.   Regarding claim 2, modified Dunning teaches the system of claim 1 as described above. Dunning further teaches the following:

the artist similarity module is further configured to identify the one or more similar *artists based on a plurality of artists associated with the source of items*, (pg. 6, paragraph [0092]), i.e. search results may be augmented by including <u>secondary results</u> that are similar to or related to the primary results, according to the relationship discovery techniques of the present invention.

11.   Regarding claim 3, modified Dunning teaches the system of claim 1 as described

above. Dunning further teaches the following:

a collection of items of a user that correspond to the source of items, (pg. 8,

paragraph [0130]), i.e. candidate songs are scored to find violations of sequence

constraints by rule engine 164 that has access to <u>a list of all potentially playable songs</u>

<u>as audio files 165</u> and a listener history 167 containing the songs that the current

listener has heard on this station.

12.   Regarding claim 4, modified Dunning teaches the system of claim 1 as described

above. Dunning further teaches the following:

a rendering device that is configured to render items identified in the playlist (see

Fig. 23F).

13.   Regarding claim 5, modified Dunning teaches the system of claim 1 as described

above. Dunning further teaches the following:

the system is further configured to create a subset of source items from the

source of items, based on one or more general preferences of the user, (pg. 7,

paragraph [0106]), i.e. web site 106 offers the capability for <u>suggesting tracks and</u>

<u>artists that may interest the user, based on personal criteria 111, profiles 112</u>, of track-

level discovered relationships based on observed user listening behavior determined by

log analysis 112 of play logs 114, *and*

the playlist generator is further configured to limit the selected item to the subset

of source items (as may be seen in Dunning, the user is limited to results of a search.

These presented artists are interpreted to be a "subset" of items, where the "items" are

all possible results).

14.   Regarding claim 6, modified Dunning teaches the system of claim 1 as described

above. Dunning further teaches the following:

one or more items of the source of items are accessible via an Internet access,

(pg. 6, paragraph [0092]), i.e. in one embodiment, module 104 presents a series of

"browse pages", viewable via web site 106, for browsing through lists of related music

tracks and artists. The user may follow links for particular tracks and artists, to either

play the tracks, or continue browsing for additional related tracks.

15.   Regarding claim 12, modified Dunning teaches the system of claim 1 as

described above. Dunning further teaches the following:

the item selector is further configured to select the selected item based on

whether the selected item is similar to other items associated with the selected artist,

(pg. 6, paragraph [0092]), i.e. search results may be augmented by including secondary

results that are similar to or related to the primary results, according to the relationship

discovery techniques of the present invention.

16.   As per claim 13, Dunning teaches the following:

Facilitating a user to identify an identified artist (see Fig. 11, #1101),

using *an artist similarity module of the system to identify one or more similar*

artists to the identified artist thereby forming an artist list (see Fig. 11, #1102);

However, Dunning does not explicitly teach a method where the interface allows

the user to approve or modify the artist and artists are selected iteratively. Porteus

teaches the following:

facilitating the approval or modification of the artist list by the user, (column 3,

lines 19-29), i.e. the user is presented with a plurality of artist blocks for each

supergenre, along with the names of selected artists that have been categorized in each

block when appropriate. The user is then asked for his or her preferences relating to

the desirability of including such blocks into his/her station's rotation, as shown in block

12. In the preferred embodiment of the invention, the user is given four choices for the

user's interest in hearing songs from each artist block, ranging from "Never" to "a Lot",

with two levels of "Sometimes" in between. The user's expression of interest is used to

adjust the preliminary ratings for all of the artists in that block;

using an *artist selector for the system to iteratively select an artist from the one or*

more similar artists, (column 3, lines 56-57), i.e. to produce the master playlist, <u>artists</u>

<u>are chosen according to the rating assigned to them</u>,

 using an *item selector for the system to iteratively select an item associated with*

the select artist, (column 3, lines 56-58), i.e. to produce the master playlist, artists are

chosen according to the rating assigned to them, <u>and individual songs by those artists</u>

<u>are selected</u>, *and*

include an identifier of the select item in the playlist, (column 3, lines 56-58), i.e. to produce the master playlist, artists are chosen according to the rating assigned to them, and individual songs by those artists are selected <u>for inclusion in the master playlist</u>.

It would have been obvious to one of ordinary skill in the art to have modified the artist similarity discovery method of Dunning with the rating and playlist creation method of Porteus. One of ordinary skill in the art would have been motivated to have made such modifications because both Dunning and Porteus are analogous art in the field of aiding users in creating playlists of songs. Upon the modification of Dunning in view of Porteus a user would first input and discover similar artists of an identified artist. The user would than be provided with the block interface of Porteus to modify the artist list and create the playlist.

17.   Regarding claim 14, modified Dunning teaches the system of claim 13 as described above. Dunning further teaches the following:

selecting the selected artist includes selecting the selected artist from a plurality of artists associated with the source of items, and *selecting the selected item includes selecting the selected item from a plurality of items in the source of items* (see page 9, paragraph [0128] through page 10, paragraph[0134] where Dunning teaches that their matches are found from the overall collections).

18.   Regarding claim 15, modified Dunning teaches the system of claim 13 as

described above. Dunning further teaches the following:

         identifying a subset of source, items from a source of items, based on one or

more preferences of a user, (pg. 7, paragraph [0106]), i.e. web site 106 offers the

capability for suggesting tracks and artists that may interest the user, based on personal

criteria 111, profiles 112, of track-level discovered relationships based on observed user

listening behavior determined by log analysis 112 of play logs 114, and

         wherein selecting the selected item includes selecting the selected item from the

subset of source items (as may be seen in Dunning, the user is limited to results of a

search. These presented artists are interpreted to be a "subset" of items, where the

"items" are all possible results).

19.   Regarding claim 20, modified Dunning teaches the system of claim 13 as

described above. Dunning further teaches the following:

         selecting the selected item includes determining a similarity of the selected item

to other items associated with the selected artist, (pg. 6, paragraph [0092]), i.e. search

results may be augmented by including secondary results that *are similar to or related*

to the primary results, according to the relationship discovery techniques of the present

invention, and

         selecting the selected item based on the similarity, (pg. 6, paragraph [0092]), i.e.

search results may be augmented by including secondary results that are similar to or

related to the primary results, according to the relationship discovery techniques of the

present invention.

20.   Claims 8-10 and 16-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Dunning in view of Porteus as applied to claims 1 and 13 as

described above, and further in view of Cluts et al. (US 5,616,876), hereinafter Cluts.

21.   Regarding claims 8, 10, 16, and 18, Dunning teaches the system of claims 1 and

13 as described above. However, Dunning does not explicitly teach a method of a

selection of a level of artist similarity. Cluts teaches the following:

> *a user interface that facilitates selection of a level of artist similarity, and wherein*
> *the artist similarity module is configured to identify the one or more similar artists based*
> *on the selected level of artist similarity*, (column 16, lines 1-6), i.e. the method of
>
> searching for and matching the entries in the audio content database employs a
>
> qualitative scale of closeness, which is controlled by a matching closeness indicator. In
>
> the preferred system, the matching closeness indicator is a style slide, which is
>
> presented as part of the user interface.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have further modified the similar artist search method of Dunning

with the matching closeness indicator of Cluts. One of ordinary skill would have been

motivated to have made such modifications because both Dunning and Cluts are

analogous art in the field of searching audio files.

22.   Regarding claims 9 and 17, modified Dunning teaches the system of claims 1

and 13 as described above. However, Dunning does not explicitly teach a method of a

selection of a level of artist diversity. Cluts teaches the following:

a user interface that facilitates selection of a level of artist diversity, and wherein

the artist selector is configured to select the selected artist based on the selected level

of artist diversity, (column 16, lines 1-6), i.e. the method of searching for and matching

the entries in the audio content database employs a qualitative scale of closeness,

which is controlled by a matching closeness indicator. In the preferred system, the

matching closeness indicator is a style slide, which is presented as part of the user

interface.

The examiner interprets this teaching of Cluts to encompass applicant's claim in

that a user of Cluts's matching closeness indicator setting that indicator to that of low

closeness, the results would be more diverse that that of a high closeness.

23.   Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Dunning in view of Porteus as applied to claims 1 and 13 above, and further in

view of "PATS: Realization and User Evaluation of an Automatic Playlist Generator",

published in 2002, by Pauws et al., hereinafter PATS.

24.   Regarding claims 11 and 19, Dunning teaches the method of claims 1 and 13 as

described above. However, Dunning does not explicitly teach a method of clustering

the items. PATS teaches the following:

an item cluster module that is configured to partition each item associated with the selected artist in the source of items into one or more clusters, based on attributes associated with each item, and wherein the item selector is further configured to select the selected item based on the cluster of the one or more clusters associated with the selected item, (page 3, paragraph 2.4), i.e. songs are clustered based on a similarity measure that selectively weighs attribute values of songs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the similar artist search method of Dunning with the clustering method of PATS. One of ordinary skill would have been motivated to have made such modifications because both Dunning and PATS are analogous art in the field of searching audio files.

Response to Arguments

25.   Applicant's arguments filed 12/23/2008 have been fully considered but they are not persuasive.

26.   Applicant first argues on page 9 of their amendment that claims 1-12 include structure, i.e., "user interface" for enabling a user to enter instructions, and therefore these claims cannot be considered merely a computer program.

The examiner respectfully disagrees.

The examiner contends that the "user interface" of applicant's system of claims

1-12 may be interpreted to be simply a component of the computer software per se.

Computer software per se is discussed in the MPEP in section 2106.01 which reads:

> 2106.01 [R-6]   Computer-Related Nonstatutory Subject Matter
> Descriptive material can be characterized as either "functional descriptive
> material" or "nonfunctional descriptive material." In this context, "functional descriptive
> material" consists of data structures and computer programs which impart functionality
> when employed as a computer component. (The definition of "data structure" is "a
> physical or logical relationship among data elements, designed to support specific data
> manipulation functions." The New IEEE Standard Dictionary of Electrical and
> Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but
> is not limited to music, literary works, and a compilation or mere arrangement of data.
>   Both types of "descriptive material" are nonstatutory when claimed as descriptive
> material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. **When functional descriptive
> material is recorded on some computer-readable medium, it becomes structurally
> and functionally interrelated to the medium and will be statutory in most cases
> since use of technology permits the function of the descriptive material to be
> realized**. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed.
> Cir. 1994)(discussing patentable weight of data structure limitations in the context of a
> statutory claim to a data structure stored on a computer readable medium that
> increases computer efficiency) and >In re< Warmerdam, 33 F.3d *>1354,< 1360-61, 31
> USPQ2d *>1754,< 1759 (claim to computer having a specific data structure stored in
> memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31
> USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

(relative portions highlighted)

27.   Applicant's arguments with respect to the rejections of claims 1-7, 12-15 and 20

under 35 U.S.C. 102(e) have been considered but are moot in view of the new

ground(s) of rejection.

Conclusion

28.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

     -Ward (US 6,526,411), system and method for creating dynamic playlists.

     -Rydenhag (US 2007/0061409), user interface for an electronic device.

29.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

     A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

30.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to GREGORY A. DISTEFANO whose telephone number is

(571)270-1644. The examiner can normally be reached on Monday through Friday, 9

a.m. - 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GREGORY A DISTEFANO/
Examiner, Art Unit 2176
3/24/2009

/DOUG HUTTON/
Supervisory Patent Examiner, Art Unit 2176